# Maginot Line or Fort Apache?

## Using Forts to Shape the **Counterinsurgency Battlefield**

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It is an incontestable fact that no kind of fortress, wheresoever placed, however strongly manned, however expensively constructed, and however numerous its garrison, has ever given permanent security to a State—has seldom indeed given it even temporary protection. Moreover, a fortress once invested is certain to fall, unless a relieving field-army can beat the besiegers away. We read in the history of one generation of the "virgin" fortress of Ingoldstadt or of Metz, but when we open the records of another generation, we find that its pride has bitten the dust.

In some cases a very small fort in a well-chosen position may puzzle a general of genius.

—T. Miller-Maguire<sup>1</sup>

S THE 19TH CENTURY waned and the 20th century dawned, T. Miller-Maguire, a noted, prolific military writer, disparaged the fortification mentality of the French, citing the futility of their northern fortifications during the 1800s. In 1899, he scorned French efforts in the Ardennes well before the failures of those fortifications during World Wars I and II.

Maguire was not alone. Fortifications and fortified field works have a bad reputation among casual military historians and experienced generals. The generations after Maguire saw the Maginot Line bypassed and the vaunted Eban Emael taken easily by German paratroops and concluded fortifications are expensive, become obsolete rapidly, and are bypassed easily if not taken. Moreover, troops garrisoning fortifications are prone to defensive-mindedness and timidity. Offensive-mindedness and maneuver are preferred to indecisive, protracted fortification warfare.

Even so, fortifications have served well in certain strategic contexts and should not be discarded as a contributing element in strategic military planning, either in the defense or the offense. In the 16th and 17th centuries, the forts of continental Europe were deployed in such a way as to promise an invader that, if he did not take them, the forts' garrisons would play havoc on his line of communication (LOC) and retreat.<sup>2</sup> The forts were located not so much for protection of the area where they were built but as part of a greater strategy of defense in depth. They also served expansionist aims by extending and protecting friendly lines during strategic advances. Even Maguire, while generally chiming in with the maneuver generals' more recent contempt for fortifications, included a clear exception when it came to the "works devised by ourselves to meet the exigencies of irregular warfare..."3

Fortifications can be an effective part of an offensive strategy in counterinsurgency and can increase the probability of success in friendly offensive operations especially when placed across enemy LOCs. Correctly placed, they contribute to success in the offense by closing enemy lines of retreat, shortening the distance in time and space to enemy culminating points, and lengthening time and distance to friendly culminating points by improving friendly resupply. Carefully sited fortifications can shape the battlefield for victory in irregular warfare.

Permanent fortifications were built to strengthen frontiers, serve as forward bases for offensive operations, control LOCs, secure key passes and major population centers, and provide an economy of force measure to free troops to become part of a mobile reserve or an assault force. As such, fortifications have occupied key geographic sites that controlled the transportation, political, and economic life of nations. In spite of the standard criticisms, forts have often served their purpose admirably. An early American example is Fort

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Form Approved OMB No. 0704-0188 McHenry's contribution to the defense of Baltimore during the War of 1812. Now such massive old defensive works are military curiosities and cultural patrimony, but their quaintness should not blind today's military planners to the viable, vital role fortifications can still play. Another quote from Maguire helps make the point: "Once the reader understands that soldiering and fighting are far from synonymous—that in a campaign combats are occasional while marching is constant—that before entering into battle a general must be most careful to secure his line or lines of retreat; he understands the leading principles of strategy, whether he can define the phrase to his satisfaction or not. He sees that a general whose road homeward or to his base is threatened or cut by a superior force must, if he loses a decisive battle, be ruined as well as defeated; while a general who has secured his lines of communication will not be ruined even if defeated, but can fall back, procure recruits, replenish his wagons, and begin to fight again with a fair prospect of success."4

To the 21st-century practitioner, Maguire's definition might sound more like operational art than strategy, but the point is clear and applies to all commanders—guerrilla commanders included. Whatever the special nature of guerrilla or irregular warfare, classic military principles still hold some sway. The guerrilla leader must not allow his LOC, especially his lines of retreat, to be cut. The commander fighting a counterinsurgency should determine whether the positioning and architecture of his fortifications and fortified compounds consider the enemy (or only the friendly) LOCs. Are his fortifications sited to shape the battlefield to increase the likelihood of insurgent defeat? Or, are they placed only to protect friendly LOCs? Worse, are they placed only to protect high-value targets? If the fortifications are designed only to protect vulnerable economic targets such as oil pipelines, history suggests they will ultimately fail, even though such target-hardening might be indispensable in the near term. If the fortification plan revolves around force protection and securing fixed lines of friendly communication, the posts might be immediately useful but fail to contribute to a larger offensive strategy.

The venerable 1940 U.S. Marine Corps *Small Wars Manual* (based in good part on the U.S. experience in the Philippines and Central America) recommends establishing fortified advance bases for logistics support to columns moving inland from the coast.<sup>5</sup> After larger groups of hostile

forces have been pushed out of an area, the next step is to establish friendly advance bases and fortified posts inland for execution of the next phase—the operation of "flying columns" into the interior.<sup>6</sup> "The particular functions of a fortified post are as follows:

- (1) To cover productive areas and their lines of communication with their markets.
- (2) To afford protection to the local population in that area.
- (3) To form a base of supply, rest, replacement, and information for flying columns.

Often . . . it will be found that conditions will warrant the construction of an entirely new fortified post. . . ."<sup>7</sup>

The Marine manual stresses the use of fortifications for logistic support to the offensive force with less emphasis on using them to interdict enemy LOCs because identifying the enemy line of retreat or the insurgent lines of resupply had been difficult.

British and U.S. counterinsurgency doctrine has long recognized a need to separate insurgents from their sources of supply and recruits. Achieving this goal has often been more a question of social, legal, and psychological preparation than of physical geography. Establishing precise physical insurgent LOCs is a challenge. Nevertheless, it is possible. The first task is to divide the battlespace into manageable compartments. The next task has always been to conduct a thorough census and do the tedious work of identifying and carding the entire population. Next is developing cadastres (property registries) and creating family, business, and other association-link diagrams.

Link-pattern analyses, geographic profiling, association matrices, and the like, especially in complex urban environments, will disclose bases, routes, territorial boundaries, and the physical routes of individual insurgent groups. On the basis of this intelligence, key geography will emerge where insurgents could establish new communities, change property relationships, or regroup in friendly installations.

An *El Tiempo* article titled "Blocking FARC Corridors" illuminates a significant aspect of the Colombian Government's increasingly successful counterinsurgent strategy against one guerrilla organization. <sup>10</sup> In Colombia, many new, fortified police stations are being placed along known guerrilla LOCs. The police presence serves to counter the isolation and marginalization of rural communities affected by the internal conflict as well



A recently completed new mess deck (shown here on 4 July 2005) to give Soldiers, Marines, and Sailors a more-fortified structure in which to eat.

as to increase the operational range of friendly military forces by maintaining supplies. The driving idea behind the location of the new stations is to change the shape of the Colombian battlefield by confounding guerrilla resupply and making guerrilla escape routes less tenable in the face of Colombian military pursuit. In other words, while police stations will help protect and service remote communities, the strategic logic for geographic placement is part of a military offensive plan, not the simple defense of towns or infrastructure.

The military logic follows an offense-minded appreciation of Colombia's compartmentalized geography as well as a mutually supportive relationship between police and military. The police, anticipating being magnets of attack by the Revolutionary Armed Forces of Colombia (FARC), have suitably fortified the stations. Correspondingly, the government high command knows any station is subject to being overrun eventually unless a relief force can be dispatched on time—"on time" being a concept that depends on the physical characteristics of the fort as well as the amount of firepower the guerrilla force can bring to bear.

The war of fortifications in Colombia spans many types of terrain, including triple-canopy jungle. As government forces have followed the FARC into jungle terrain, they have encountered many small, well-camouflaged fortifications protecting drug labs and LOCs. The government now overruns these positions because the FARC is no longer able to mount timely relief efforts in sufficient strength. Once government troops take a FARC fortification, they often occupy it—unless it is too dangerous to do so because of illicit drug-related chemicals—in order to sever the FARC's LOC. As each jungle outpost changes hands, the strategic balance shifts further toward the government.

In Pakistan, the government established a dozen new small forts and approximately 60 associated outposts to help control the Chaman border area across from Afghanistan. As in Colombia, these Pakistani outposts serve to secure friendly LOCs and provide bases for extending government control measures to remote areas. They were conceived to play a role in offensive military operations to rid the area of Taliban and other guerrilla forces by lying across enemy LOCs. While the Colombian and Pakistani military situations are quite distinct, they both effectively incorporate small, semipermanent fortifications into proactive military strategies.

Fortifications can be permanent or temporary. They can be large, super-modern government or commercial buildings or a knocked-together site consisting of barbed wire, an observation post, and a communications center. They can serve as economy of force, traffic control, or garrison security measures. But they can also be used in

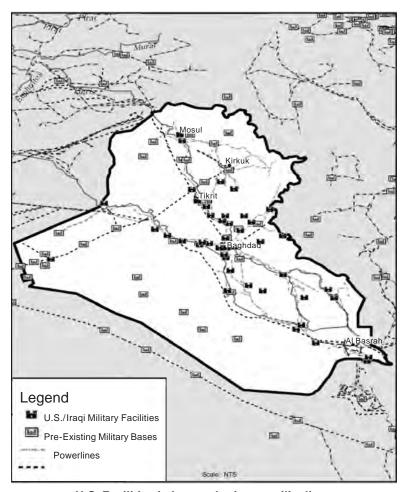
a network fashion to shape the battlefield by disrupting enemy movement, fragmenting enemy neighborhoods and safe havens, and forcing the enemy to abandon key areas. The key is location, location, location.

The map shows former Iraqi regime and U.S. fortifications in relation to oil pipelines and power lines and in relation to the primary road network. Note that the pattern of U.S. fortified facilities is linear, while the distribution of former Iraqi regime fortifications is a network. It appears the location of fortified U.S. facilities correlates to the existence of economically vulnerable targets (pipelines, in particular) and available real estate (airfields and palaces). While this is logical and normal, the maps also suggest that the placement of former Iraqi regime fortifications was more suited to internal control: that is. to combating potential internal challenges as well as providing defense in depth from external attack. The U.S. fortified positions do not immediately appear

to be an integral part of a comprehensive offensive strategic plan based on the geography of insurgent logistics and escape, and in the long run, that might represent a missed opportunity.

### Intelligence Support to Fortification Placement

Counterinsurgency commanders usually focus tactical intelligence collection on finding enemy guerrilla bombers or the mortar-gunners who endanger friendly troops, but these guerrilla foot soldiers are also the easiest for an insurgent enemy to replace. At the other end of the spectrum are the major international players and money people sponsoring the insurgency. Intelligence operations and actions against these targets are also commendable, but they might have limited effect on the immediate counterinsurgency battle. Strategic or operational intelligence that identifies the insurgent logistics infrastructure in the theater is often lacking. To be geographically and, thus, militarily relevant, intelligence should locate the



U.S. Facilities in Iraq and primary utility lines.

best sites for friendly fortifications, even if no forts are put there.

Operational intelligence can identify guerrilla territory, organization, logistics structure, LOCs, strongholds, and sanctuaries, and fortifications can then be placed where they are effective yet not easily assailable. A valley position surrounded by mountains is probably not a good choice; nor is a one-story police station in a highrise neighborhood located at the end of a dead-end street. Fortifications are best situated to dominate their surroundings and allow rapid deployments in multiple directions. Obviously, it is not the building itself, but the forces it protects that must be enabled by location to disrupt guerrilla ability to move, mass, and transport. The best fortifications are located and constructed for ease of defense, ease of relief, and ease of launching raids, sweeps, and counterattacks. Fortifications are often necessary to support a system of checkpoints, the positioning of which should also support offensive operations. Like the forts, checkpoints work best as a network designed to shape the battlefield.

The purpose of fortifications in a counterinsurgency is to—

- Provide the ability to rapidly seal off distinct, reasonably sized sectors and prevent sector breakouts or break-ins while the sector is being searched or isolated.
- Improve the ability of lawful forces to move rapidly and unhindered throughout the area.
- Provide or withhold at will access to electricity, fuel, water, and food, as well as services such as medical care, sewage processing, garbage collection, and firefighting.
- Segregate or isolate suspect parts of the populace from the general population.
  - Protect or aid patrols and convoys.
- Dominate, disrupt, and discredit the insurgency.
- Serve as a constant reminder of the lawful government and its allies' strength and presence.
  - Protect major movement arteries.
- Support networks of checkpoints, both fixed and mobile.

In an urban environment, well-placed fortifications, combined with normal city infrastructure such as freeways, tunnels, railroad yards, rivers, factory blocks, and walls, can seal off areas and create funneling and filtration points. The idea is not to flood a city with strongpoints, but to provide enough strongpoints for control while freeing a reserve for cordon-and-search and other sector missions. Fortifications (and in the urban setting most of these will be police stations) should provide control, information, and ease of action, and deny these to the enemy. If they do not, they probably should be shut down and moved.

City governments have historically controlled their populations through bureaucracy, law, religion, and education and by—

- Controlling commodity access.
- Segregating castes, races, classes, and troubleprone businesses into designated neighborhoods.
- Controlling movement to and through key neighborhoods and centers.
  - Controlling services.
- Maintaining a system of rewards and punishments for their citizenry.<sup>11</sup>

These aspects of control architecture can help the military and police mission. Many cities have rebuilt key centers to incorporate control architecture. While appearing to improve access to an area, this new architecture actually allows a small security element to control or deny access. Many of these city centers are self-contained, with their own water, food, and electrical supplies.<sup>12</sup>

While placement is the first, most critical, and classic question for planning fortification in a counterinsurgency strategy, fort locations in large urban areas should incorporate larger architectural/urban planning-control design elements. In addition, there are many cutting-edge technologies that can contribute to the efficiency of an urban fort. For instance, closed-circuit television (CCTV) is a fact of life in most European, Japanese, Canadian, and U.S. cities. CCTV monitors high-traffic areas, high-crime areas, isolated loading docks, passenger terminals, store displays, parking lots, and the like. The average urban U.S. citizen might appear on a CCTV screen seven times in the course of a normal day of city living. Traffic light and speed zone automatic cameras increase this coverage. CCTV records activities that are important to military and police missions and should be installed throughout the urban area, starting with high-incident areas and key facilities. CCTV and other sensors, mounted on buildings, vehicles, robots, or even on tethered blimps, provide semipermanent urban and even outlying rural coverage. The urban fortress provides a safe place to house or monitor various electronic sensors.

#### The Operational View

The viability of LOCs and logistics sites is always a key interest of operational art. Lines of communication need to be maintained for resupply and the eventuality of retreat. Guerrilla war might be fought primarily at the tactical level, but logistics and movement remain operational concerns-for all contestants. Guerrilla forces must maintain access to their logistics, redoubts, arms caches, hospitals, and sanctuary areas, both internally and in neighboring countries. When guerrilla LOCs are disrupted, their tactical constraints mount, and the probability of tactical advantage in any given encounter diminishes. A counterinsurgency fortification system that focuses exclusively on force protection or the protection of economic targets might be missing an opportunity. The best system of fortifications is one designed to create operational advantages, to disrupt guerrilla operational and logistics movements, to shape the battlefield, to be part of the offense, and to wrongfoot the guerrilla.

Forts are not new, and, perhaps for this reason, are overlooked in recent military considerations of technological change. The books *Low-Intensity Conflict and Modern Technology*, by David J. Dean, and *LIC in 2010*, by Rob Paschall, are representative of recent U.S. approaches to modern

counterinsurgency warfare. 13 Dean and Paschall discuss light aircraft, nuclear weapons (in lowintensity war, no less), lasers, simulators, and training methods, but they do not mention improvised explosives, antipersonnel land mines, or the organizational technologies associated with kidnapping. These books reflect an American desire to use technology to help solve military problems. However, just as the authors misread the central aspects of the threat environment, they also overlook an important technological response. Insurgencies end in various ways, often including political and economic agreements and rarely on the basis of military actions alone, and certainly not on the application of a single technology. Fortifications can be one part of a military and police counterinsurgency effort, but other parts include efficient bureaucracy, effective intelligence, relevant military and police training, stable civil-military relations, legitimate governance, and political will.<sup>14</sup>

A good fortification plan can contribute to success in counterinsurgency, but fortification might also present advantages beyond the confines of military operations. The decisive and timely display of force is easily understood and can help minimize the danger of having to exercise that

force. 15 Some intimidation, therefore, is at times considered a useful part of gaining respect and conducting a successful counterinsurgency. Forts can provide the necessary show of force. Also, fixed fortifications allow foreign contingents to participate in a coalition strategy without the political exposure of direct offensive action. Finally, fortified buildings can be constructed for multiple uses so the eventual success of the strategy does not lead to scrapping the structures.

#### **Bottom Line**

Because fortification networks can contribute to offensive counterinsurgency, military engineers might revisit fortification and control architecture, doctrine writers should go back and see where forts are missing in the doctrinal literature, intelligence officers should practice geographic analysis for the proper placement of fortifications and support to engineers, and police organizations should consider the manning and provisioning requirements implied by a fortification strategy. Most of all, the counterinsurgent strategist, on reviewing the locations of his fortified positions must at least ask the question, If we are not interdicting enemy LOCs, what are we doing? MR

#### **NOTES**

- 1. T. Miller-Maguire, Military Geography (London: C.J. Clay & Sons, 1899),
- See Christopher Duffy, Siege Warfare: The Fortress in the Early Modern World 1494-1660 (New York: Routledge, 1979).
  - 3. Ibid., 216.
- 5. U.S. Marine Corps, Small Wars Manual, United States Marine Corps 1940 (Washington, DC: U.S. Government Printing Office [GPO], 1940, reprinted at Manhattan, KS: Sunflower University Press, no date), 3-3, 3.
  - 6. Ibid., 5-8, 6.
- 7. Ibid., 5-11, 9.
- 8. See, for instance, John A. Nagl, Counterinsurgency Lessons from Malaya and Vietnam (Westport, CT: Praeger, 2002), 71, citing the wisdom of LTG Sir Harold Briggs in his counterinsurgency campaign during the Malayan Emergency.
  - 9. Lester W. Grau, "Something Old, Something New: Guerrillas, Terrorists, and

- Intelligence Analysis," Military Review (July-August 2004): 42-49.
- 10. Jorge Luis Durán Pastrana, "Bloque a corredores de FARC" [Blocking FARC
- corridors], *El Tiempo*, 4 March 2004, 2-4.

  11. Grau and Geoffrey Demarest, "Diehard Buildings: Control Architecture–A Challenge for the Urban Warrior," Military Review (September-October 2003):
- Grau and Jacob W. Kipp, "Urban Combat: Confronting the Specter," Military Review (July-August 1999): 16.
- 13. David J. Dean, Low Intensity Conflict and Modern Technology (Maxwell Air Force Base, AL: Air University Press, 1986); Rob Paschall, LIC 2010: Special Operations and Unconventional Warfare in the Next Century (Washington, DC:
- 14. Charles W. Gwynn, Imperial Policing, 2d ed. (London: MacMillan, 1939), 381.
- 15. Ibid., 181.

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